

WHAT IS CLAIMED IS:

1. A door unlocking method to be implemented using an anti-theft device of an automobile, the automobile including an automobile door, and an interior door lock mounted on the automobile door, the interior door lock being operable in one of a locking mode, where opening of the automobile door is inhibited, and an unlocking mode, where opening of the automobile door is permitted, the anti-theft device being capable of being armed when the interior door lock operates in the locking mode, said method comprising the steps of:

(A) defining a set of predetermined time periods, and a set of predetermined count values corresponding to the set of predetermined time periods;

(B) detecting shaking movements of the automobile when the interior door lock operates in the locking mode; and

(C) enabling operation of the interior door lock from the locking mode to the unlocking mode and simultaneously disarming the anti-theft device when the detected shaking movements within the corresponding set of predetermined time periods match the set of predetermined count values.

2. The door unlocking method as claimed in Claim 1, further comprising the step of maintaining operation of the interior door lock in the locking mode when the detected shaking movements within the corresponding set

of predetermined time periods do not match the set of predetermined count values.

3. The door unlocking method as claimed in Claim 1, wherein the set of predetermined time periods includes
5 first and second predetermined time periods, whereas the set of predetermined count values includes first and second predetermined count values that correspond respectively to the first and second predetermined time periods.

10 4. The door unlocking method as claimed in Claim 1, further comprising the step of operating the interior door lock from the unlocking mode to the locking mode and simultaneously arming the anti-theft device when the automobile door is not opened within a predetermined
15 delay time period after step (C).

5. An anti-theft device for an automobile, the automobile including an automobile door, and an interior door lock mounted on the automobile door, the interior door lock being operable in one of a locking mode, where opening
20 of the automobile door is inhibited, and an unlocking mode, where opening of the automobile door is permitted, said anti-theft device being armed when the interior door lock operates in the locking mode, and comprising:

25 a sensing circuit operable so as to detect shaking movements of the automobile when said anti-theft device is armed; and

a control circuit coupled to said sensing circuit,

and adapted to be coupled to the interior door lock,
said control circuit enabling operation of the interior
door lock from the locking mode to the unlocking mode
and simultaneously disarming said anti-theft device
5 when the detected shaking movements within a
corresponding set of predetermined time periods match
a set of predetermined count values.

6. The anti-theft device as claimed in Claim 5, wherein
said control circuit maintains operation of the interior
10 door lock in the locking mode when the detected shaking
movements within the corresponding set of predetermined
time periods do not match the set of predetermined count
values.

7. The anti-theft device as claimed in Claim 5, wherein
15 said sensing circuit is operable so as to generate a
voltage signal for each detected shaking movement, said
control circuit including

a timer for timing the set of predetermined time
periods, and

20 a counter for cumulatively counting the voltage
signals generated by said sensing circuit within the
set of predetermined time periods.

8. The anti-theft device as claimed in Claim 5, wherein
the set of predetermined time periods includes first
25 and second predetermined time periods, whereas the set
of predetermined count value includes first and second
predetermined count values that correspond respectively

to the first and second predetermined time periods.

9. The anti-theft device as claimed in Claim 8, wherein the first predetermined time period has a duration of three seconds.

5 10. The anti-theft device as claimed in Claim 8, wherein the first predetermined count value has a value of three.

11. The anti-theft device as claimed in Claim 8, wherein the second predetermined time period has a duration of three seconds.

10 12. The anti-theft device as claimed in Claim 8, the second predetermined count value has a value of five.